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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/585,447

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Reuven Zeitak

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EXAMINER

CHANG, JUNGWON

ART UNIT

PAPER NUMBER

2454

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,447	Applicant(s) ZEITAK, REUVEN	
	Examiner JUNGWON CHANG	Art Unit 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 11-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to applicant's election of group I, claims 1-10. Claims 11-32 have been withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horiguchi et al, (US 2002/0071387), hereinafter Horiguchi, in view of Santiago et al, (US 2002/0186661), hereinafter Santiago.

4. As to claim 1, Horiguchi discloses the invention as claimed, including in a communication network, a method for resource bundling comprising the steps of:

a) receiving, at a network *router*, a plurality of data flows having different class of service (CoS) priority levels, said data flows associated with a single user having an allocated bandwidth (figs. 6, 16-17; page 2, 0014);

b) processing said data flows while sharing said allocated bandwidth between said different CoS priority levels in a prioritized manner (figs. 6, 16-17; page 1, 0004-0006); and,

c) forwarding said processed data flows to the communications network (fig. 1; page 4, 0046).

5. Although Horiguchi discloses police (page 1, 0010) and it is well known in the art, Horiguchi does not specifically disclose a network policer. Santiago discloses a network policer (404, figs. 4-5; page 5, 0054-0057). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Horiguchi and Santiago because Santiago's teaching would improve communications by policing of communications packets using multiple levels of classification and metering, by classifying traffic streams into separate traffic flows, as taught by Santiago (page 1, 0012).

6. As to claim 2, Horiguchi discloses the method of claim 1, wherein each said data flow includes at least one data packet of a respective CoS priority level, said at least one data packet having a data packet length, and wherein said step of processing includes, for each said data packet: i. providing a threshold associated with each said CoS priority level; ii. calculating a tentative credit value for said data packet; and, iii. forming a forwarding decision based on a comparison between said tentative credit value and said threshold associated with said CoS priority level (figs. 2-6; page 5, 0055-0057).

7. As to claim 3, Horiguchi discloses the method of claim 2, wherein said forming a

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forwarding decision includes accepting said data packet if said tentative credit value is lower than a CoS threshold, and rejecting said data packet if said tentative credit value exceeds said CoS threshold (page 2, 0018-0019; page 5, 0057-0060).

8. As to claim 4, Horiguchi discloses the method of claim 2, wherein said providing a threshold associated with each said CoS includes providing a CoS threshold that defines a permitted burst size for said CoS priority level (page 2, 0018-0019; page 5, 0057-0060).

9. As to claim 5, Horiguchi discloses the method of claim 2, wherein said providing a threshold associated with each said CoS includes providing a threshold that has a configurable value (page 2, 0018-0019; page 5, 0057-0060).

10. As to claim 6, Horiguchi discloses the method of claim 3, wherein said calculating a tentative credit value includes deducting said data packet length from an available credit value (page 2, 0018-0019; page 5, 0057-0060).

11. As to claim 7, Horiguchi discloses the method of claim 6, wherein said available credit for a data packet received at a time $t_{sub,j}$ is calculated using the formula $C_{sub,j} = \min \left[\text{left brkt-bot.CBS}, C_{sub,j-1} + \text{CIR.times.}(t_{sub,j} - t_{sub,j-1}).\text{right brkt-bot.} \right]$, wherein said CBS is a committed burst size and wherein said CIR is a committed information rate (page 5, 0062-0064).

12. As to claim 8, Horiguchi discloses the method of claim 6, wherein the step of accepting said data packet further includes: A. setting said tentative credit value to equal said available credit value; B. marking said data packet with a color tag that defines a permitted rate for said data packet; and, C. transmitting said color tagged data packet on the network (page 4, 0047-0051, "marker").

13. As to claim 9, Horiguchi discloses the method of claim 8, wherein said transmitting said color tagged packet on the network includes transmitting said color tagged packet on a network selected from the group consisting of an Ethernet network and a metro Ethernet network (page 1, 0004-0006).

14. As to claim 10, Horiguchi discloses the method of claim 1, wherein said step of processing includes processing said data flows using a computer implemented code (page 4, 0053-0054).

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Khurana et al (US 2004/0028054), Chuah (US 2003/0214928), Li et al (US 7,577,161), Cunningham (US 2002/0087713), Veres et al (US 6,614,790) disclose Class-based bandwidth allocation and admission control for virtual private networks with differentiated service.

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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNGWON CHANG whose telephone number is (571)272-3960. The examiner can normally be reached on M-F 6:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JUNGWON CHANG/
Primary Examiner, Art Unit 2454
November 22, 2009